



## **Distribution System Infrastructure Lesson Plan**

### **Overview:**

This lesson, as part of distribution system infrastructure we will cover piping, valves, storage tanks, and hydrants. The lesson shows how this infrastructure impacts water quality and provides solutions to common problems.

### **Learning Objectives:**

At the completion of this lesson, participants should have the ability to:

- Be able to describe components of the DS, and how they can impact water quality
- Be able to describe potential areas of water quality concern in your system, and consider ways to improve these

### **Materials Needed:**

- PowerPoint presentation
- Participant handouts, pre- and post-tests

### **Agenda:**

Agenda development is based on a 45-minute lesson:

- 10 min – Introduction, pipe systems, and dead ends
- 5 min – Dead end discussion
- 10 min – Valves and cross connections
- 10 min – Storage tanks and hydrants
- 10 min – EPANet demo and water age activity

### **Evaluation:**

Pre and post tests will be administered before and after the workshop along with the other lessons' questions.